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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,866	09/20/2000	Brian J. Brown	S63.2-9397	1548

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SUITE 2000
MINNETONKA, MN 55343-9185

EXAMINER

PREBILIC, PAUL B

ART UNIT PAPER NUMBER

3738

DATE MAILED: 03/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/666,866

Applicant(s)

BROWN ET AL.

Examiner

Paul B. Prebilic

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s) _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 27, 2002 has been entered.

Specification

Claims 39-50 were objected to because of the following informalities:

In particular, there was no claim 38 filed with the amendment filed December 27, 2002 so claims 39-50 were not numbered properly. Therefore, in order to have the amendment entered, the Examiner renumbered claims 39-50 as claims 38-49, respectively. Applicant is respectfully requested to renumber their claim set accordingly. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 36-49 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to

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reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With regard to claims 36-49, upon review of the definition for the term "undulating" (of the original specification) and "serpentine" (of the present claims), the Examiner concluded that "serpentine", which is a broader term, does not have original support because there is no evidence than any winding random shape was originally contemplated. Rather, only an undulating or wave-shaped strut pattern was contemplated. For this reason, the claims contain new matter.

Claims 36-49 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for "undulating", does not reasonably provide enablement for "serpentine". The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. The specification fails to disclose any other than an undulating strut pattern, such that it would not be clear how to make other shapes such that they would work in the same fashion.

Regarding claims 38 and 45, there is no clear original support for a differing "pattern" of bands, especially one band having two adjacent bands with different struts lengths from the one band as claimed. For this reason, the Examiner posits that the claimed invention lacks original support.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 36, 39-41, 43, and 46-48 are rejected under 35 U.S.C. 102(b) as being anticipated by Palmaz (US 5,102,417) where the adjacent bands as claimed are the grafts (70) of Palmaz, and the connecting elements as claimed are the spiral members (102) of Palmaz; see Figures 7 to 10 and column 11, line 35 to column 13, line 11.

With regard to claims 40 and 47, Applicant is directed to note that the grafts (70) of Palmaz can be made of wire mesh; the wire mesh is self-expanding; see column 13, lines 2-11.

With regard to claims 41 and 48, Applicant is directed to column 9, lines 4-27 where balloon expansion of the graft of stent is disclosed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 37, 38, 44, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palmaz (US 5,102,417) in view of Uchida et al (article entitled "Modifications of Gianturco Expandable Wire Stents") or Wolff (US 5,104,404).

Palmaz meets the claim limitations, where the struts as claimed are the elongate members (75) of Palmaz, except Palmaz fails to disclose the differing strut lengths of the bands, particularly the end band strut lengths. However, Wolff (see Figure 6 and

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column 4, lines 33-37) and Uchida (see Figure 1A on page 1186) both teach that it was known to vary the strut length. Therefore, it is the Examiner's position that it would have been obvious to vary the strut length of the Palmaz in order to adjust the diameter of the grafts to match the diameter of the blood vessel as taught by Wolff.

Claims 42 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palmaz (US 5,102,417) in view of Lau et al (US 5,735,893). Palmaz discloses using balloon expandable and self-expanding stent materials as explained *supra*, but fails to disclose using shape memory materials as claimed. However, Lau et al teaches that it was known to use shape memory materials, particularly shape memory alloys in place of balloon expandable materials; see column 2, lines 27-59. Therefore, the Examiner posits that it would have been *prima facie* obvious to use shape memory materials in place of the balloon expandable materials of Palmaz for the same reasons that Lau et al uses the same and in order to better control the expansion of the grafts (70).

Conclusion

Applicant should specifically point out the support for any amendments made to the disclosure, including the claims (MPEP 714.02 and 2163.06). Due to the procedure outlined in MPEP 2163.06 for interpreting claims, it is noted that other art may be applicable under 35 USC 102 or 35 USC 103(a) once the aforementioned issue(s) is/are addressed.

Applicant is respectfully requested to provide a list of all copending applications that set forth similar subject matter to the present claims. A copy of such copending claims is respectfully requested in response to this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Prebilic whose telephone number is (703) 308-2905. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on (703) 308-2111. The fax phone number for this Technology Center is (703) 872-9302.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 3700 receptionist whose telephone number is (703) 308-0858.



Paul Prebilic
Primary Examiner
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